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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,557	12/12/2003	Joseph B. Cross		3922

7590 12/14/2005

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EXAMINER

JOHNSON, EDWARD M

ART UNIT PAPER NUMBER

1754

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/735,557

Applicant(s)

CROSS ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) 17-103 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-16 in the reply filed on 10/3/05 is acknowledged. The traversal is on the ground(s) that a thorough search of the inventions would necessarily include all three... the Patent Office. This is not found persuasive because the searches would not be necessary, since they would not be required, as the inventions all have separate statuses in the art, as shown in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kepner '191.

Applicant claims a composition comprising vanadium and a support selected from the group consisting of: amorphous silica-

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alumina, a zeolite, a material comprising meta-kaolin, alumina, and expanded perlite; alumina, and combinations thereof, wherein at least a portion of said vanadium has crystallite sizes of less than about 100 Angstroms as determined by an analytical method such as X-Ray Diffraction.

Kepner et al. discloses an enhanced adsorbent particle comprising contacting a non-amorphous, non-ceramic, 'crystalline, porous, calcined, aluminum oxide particle that was produced by calcining at a particle temperature of from 300-700 Deg. C, with an acid. The system is comprised of two or more types of particles, which include vanadium, alumina, as well as zeolite (col. 9, lines 18-33). The vanadium has a particle size of 35 Angstroms (col. 10, lines 19-22). The particles may be in crystalline form (col. 10, lines 1-3), having # weight percentage of 1-90 parts by weight with respect to the vanadium component (col. 25, line 56 - col.. 26, line 16). The system may be used as an adsorbent or catalytic support (col. 14, lines 8-11).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepner '191.

With respect to claims 7-16, Kepner et al. discloses an enhanced adsorbent particle comprising contacting a non-amorphous, non-ceramic, crystalline, porous, calcined, aluminum oxide particle that was produced by calcining at a particle temperature of from 300-700 Deg. C, with an acid.

The system is comprised of two or more types of particles, which include vanadium, alumina, as well as zeolite (col. 9, lines 18-33). The vanadium has a particle size of 35 Angstroms (col. 10, lines 19-22).

The particles may' be in crystalline form (col. 10, lines 1-3). Furthermore, Kepner clearly discloses a vanadium supported by alumina, as well as a zeolite, and wherein the vanadium component is in an amount of from 1-90 pads by weight.

Kepner et al. continues to disclose using oxalic acid (col. 11, lines 13-37) and wherein, the system may be used as an adsorbent or catalytic support (col. 14, lines 8-11). The

material is treated from 30 minutes to 2 hours and are dried within a drying oven (col. 22, lines.63-65).

The process for producing the composition is held to be obvious, when the reference teaches a product that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim although produced by a different process See *In re Marosi*, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983), and *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP 2113.

#### ***Response to Arguments***

6. Applicant's arguments filed 10/3/05 have been fully considered but they are not persuasive.

It is argued that Kepner discloses a process for producing an enhanced adsorbent.. lines 36-40. This is not persuasive because Applicant appears to admit that heating to up to 350 degrees C is disclosed, which is Applicant's claimed calcination temperature range and also because Applicant's claimed range of greater than 100 angstroms can also be considered to "vary greatly", as Applicant characterizes the prior art sizes.

It is argued that applicants point out that the Kepner reference does not disclose... among other particles. This is not persuasive because Applicant claims a composition using open language "comprising" which would not exclude the further

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presence of a binder and because Applicant appears to admit that Kepner combines vanadium pentoxide with aluminum oxide or zeolite particles with a binder. It is noted that the features upon which applicant relies (i.e., a support without the further presence of a binder) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that Applicants also point out that Kepner... 350 angstroms in diameter. This is not persuasive because Applicant merely claims "at least a portion" of particles less than 100 angstroms, and Applicant appears to admit that 35 Angstroms, which is less than 100 angstroms, is disclosed.

#### **Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

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expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

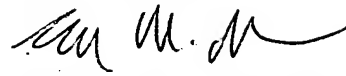


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Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "EMJ", with a stylized flourish extending to the right.

Edward M. Johnson  
Primary Examiner  
Art Unit 1754

EMJ